REMARKS/ARGUMENTS

Applicants have studied the Office Action dated November 27, 2009 (hereinafter "*Office Action*"), and have made the following remarks and submit that all pending claims 1 to 20 of the present application are in condition for allowance. Claims 1, 19, and 20 have been amended for purposes of clarity and therefore, no new matter has been added. Reconsideration and allowance of the pending claims in view of the above amendments and the following remarks is respectfully requested.

In the Office Action, the Examiner maintained the rejection of claims 1 through 20 under 35 U.S.C. §103(a) as being obvious and therefore, unpatentable over U.S. Patent No. 6,787,301 to *Ganser et al.* (hereinafter "*Ganser*") in view of U.S. Patent No. 5,592,289 to *Norris*.

Rejection under 35 U.S.C. §103(a)

As noted above, the Examiner has maintained the rejection of claims 1-20 under 35 U.S.C. §103(a) as being obvious over *Ganser* in view of *Norris* despite that the Examiner has clearly not established a *prima facie* case of obviousness in several respects regarding independent claims 1, 19, and 20. Applicants respectfully submit that the error in the Examiner's rejections stems substantially from the Examiner's misconstruing of the "x-y stage" in *Ganser* as being equal to the receptacle "holder" of claims 1, 19, and 20 of the present application.

Upon receipt of the Non-Final Office Action dated April 14, 2009, Applicants filed a Response on July 13, 2009 (hereinafter "*Response*"), in which Applicants provided a comprehensive argument identifying several limitations of claims 1, 19, and 20 that are not taught or suggested in the cited references of *Ganser* and *Norris*. In particular, Applicants set forth the uniqueness of the "holder" and its function in the laser dissection system of the present invention and the lack of any disclosure in *Ganser* of a structure akin to the holder. Notwithstanding Applicants' detailed showing, the Examiner has maintained the position that the "x-y stage" in *Ganser* is equal to the holder of Applicants' present invention.

As was set forth in the Response, the holder of the present invention is clearly described in the

specification and claims as being designed for use in the laser dissection system so that it can hold a receptacle device having a plurality of receptacle containers.[1] *See e.g.*, p. 17, lines 9-19; p. 15, lines 8-14; p. 12, lines 8-26; claims 1, 19, and 20; Fig. 2A (elements 20, 30, and 21). The receptacle containers serve to receive the dissectates excised by the laser beam from the biological material located on the object carrier. *Id.* at p. 12, lines 22-26. The holder has a unique coding feature 22 that identifies the type of the receptacle device being held by the holder. *Id.* at p. 12, lines 11-20. Furthermore, the laser microdissection system has identification means for identifying the receptacle device by recognizing the coding feature of the holder. In addition, the laser microdissection system has control means that are designed so that, depending on the receptacle device respectively identified, the control means displays information on the receptacle device and provides selection functions that are specific to the identified receptacle device to allow a user to allocate individual biological objects to be excised from the biological material to individual receptacle containers of the receptacle device. *Id.* at p. 12, line 28 – p. 13, line 22; pp. 15-16. Each of these elements is clearly present in independent claims 1, 19, and 20.

In response, the Examiner argues that the "x-y stage" is equal to the "holder" of the present invention and a "glass slide which the biological specimen is put on" is equal to a receptacle container of the present invention. *See Office Action*, pp. 2 and 6. Applicants respectfully disagree with the Examiner's conclusion.

The "x-y stage" is described in *Ganser* as a platform that a single specimen holder, such as a glass specimen slide, can be rested on so that different specimen regions may be **viewed and selected**. *See Ganser*, col. 3, lines 3-9. Thus, the Ganser "x-y stage" is a part of the microscope that serves to receive a specimen holder on which is mounted a specimen **to be examined or cut**. *Id.* at col. 4, lines 30-34. The displaceable "x-y stage" moves the specimen relative to the stationary laser beam during cutting. *Id.* at col. 3, lines 13-15. The "x-y stage" serves as a cut line control unit and generates, during the cutting operation, a relative movement between the laser beam and the specimen. *Id.* at col. 4, lines 36-38. The "cut-out specimen regions of

[1] In response to the Examiner's analysis on page 7 of the instant Office Action, Applicants have amended claims 1 and 19 to clarify that Applicants claim the actual receptacle device. Applicants did not similarly amend claim 20 as claim 20 already claims "a multi-receptacle device."

interest" are not **received** by the specimen holder of the "x-y stage." Rather, the excised portions are collected by a separate structure from the "x-y stage", i.e., at least one vessel that is below or in the vicinity of the specimen. *Id.* at col. 3, lines 9-11. Therefore, the Examiner's conclusion that the "x-y stage" is a holder and the "glass slide" mounted thereon is a receptacle container "for receiving the biological object which is excised from the biological material" is simply incorrect. *See Office Action*, p. 6. The *Ganser* "x-y stage" is a platform that holds and positions a glass slide containing a biological specimen that has not yet been cut so that the specimen may be examined under the microscope to determine any regions of interest that are desired to be excised and collected in a separate vessel. Thus, the "x-y stage" is not designed to hold a receptacle device in which biological objects can be **received**. The setup of *Ganser* is such that the laser cutting can be performed in the plane of the specimen, which is defined by the "x-y stage." *See Ganser*, col. 6, lines 58-65. If the "x-y stage" also served to hold a receptacle device for collecting the excised portions of the specimen, it would interfere with the laser cutting and render the microdissection inoperable. Accordingly, contrary to the Examiner's suggestion, the "x-y stage" as used in the rejection is not "capable" of holding a receptacle device having a plurality of containers as these features are defined by Applicants. It is imperative that the Examiner not consider the feature of the holder of Applicants' invention in isolation from all other claim features and its function as it relates to the laser dissection system as a whole.

Keeping this crucial distinction in mind, it then becomes more certain why it would not be obvious to combine *Ganser* with *Norris* in an effort to compensate for the fact that *Ganser* does not describe an identification means in addition to a control means or controller, as is required in claims 1, 19, and 20 of the present application.

The laser microdissection system of the present invention, as defined in claims 1, 19, and 20, includes a holder for holding a receptacle device that has a coding that identifies the specific type of the receptacle device. The laser microdissection system has identification means for identifying the receptacle device by evaluating the coding of the holder. The laser microdissection system has control means that are designed so that, depending on the receptacle device respectively identified by the identification means, the control means displays information **to a user** on the receptacle device and provides selection functions that are specific to the

identified receptacle device to allow **the user** to control the allocation of individual biological objects to be excised from the biological material to individual receptacle containers of the receptacle device.[2] *See e.g.*, p. 15, lines 18-19 and 30-31; p. 18, lines 10-15; p. 19, lines 5-19. As acknowledged by the Examiner, *Ganser* does not describe the system as having identification means and control means or a controller that provides selection functions specific to the receptacle device for the allocation of individual biological objects to be excised from the biological material to individual receptacle containers of the identified receptacle device, as are required in claims 1, 19, and 20 of the present application.

However, the Examiner argues that *Norris* "teaches identifying receptacles by evaluating coding and of multiple receptacle containers with different well configurations" and teaches "controlling the position of the receptacle device to allow for analysis and preparation of samples" such that it would have been obvious to combine the laser microdissection apparatus of *Ganser* with the identification mechanism of *Norris* "to provide for sample or container specific analysis and specimen specific holding due to the desire for the receptacle positioning mechanism, to accommodate analyte receptacles of various configurations and to supply this information to the computer." *See Office Action*, p. 7. Applicants respectfully disagree with this line of reasoning in several respects.

First, paying close attention to the language of claims 1, 19, and 20, each claim states that it is the **holder** that has a coding that identifies the type of receptacle device that it contains. Referring back to the Examiner's conclusion that the "x-y stage" in *Ganser* is equal to the holder of Applicants' invention, it would not have been obvious to implement the "x-y stage" to have a coding that identifies the type of receptacle device. As explained above, the "x-y stage" does not have a receptacle device having a plurality of receptacle containers for receiving excised portions of biological material and so there would be no desire to employ the "x-y stage" with a coding means for identifying a receptacle device that is not present. The "x-y stage" is not at all involved in the collection of the excised biological objects. It is a component of the microscope

[2] In further response to the Examiner's analysis on page 7 of the instant Office Action, claims 1, 19, and 20 have been amended to clarify that the controller provides information about the receptacle device that **is** displayed to a user, rather than just being "capable" of being displayed to a user, and provides selection functions that allow a user

that remains invariable. Therefore, any coding provided on the "x-y stage" would also be invariable and would not serve any meaningful purpose with regard to identifying receptacle devices **variably**. While *Norris* describes a tray 244 having circular openings 262, the skilled person would certainly not consider providing such openings (or other coding) on the "x-y stage", for such a coding would remain invariable if the receptacle device were changed.

The language of each of claims 1, 19, and 20 of the present invention also clearly and expressly states that the controller provides information about the receptacle device that is displayed to a user and provides selection functions specific to the receptacle device **to allow a user to control the allocation of individual biological objects to be excised** from the biological material to individual receptacle containers. According to the Examiner, this feature is described in column 2, paragraph 3, and the abstract of *Norris*. However, neither the abstract nor column 2, paragraph 3, of *Norris* describe selection functions. The positioning mechanism described in *Norris* does not provide for user interaction so that it can be used for a user-defined allocation of biological objects to receptacle containers. In *Norris*, information about the configuration of a particular receptacle is provided to a **computer** that controls the operation of a measuring instrument. *See Norris*, col. 3, lines 5-14; col. 7, lines 46-52. The computer may control the measurement pattern for the measurement instrument. *Norris* does not disclose that the information about the configuration of a receptacle container is displayed to the user. Further, *Norris* does not disclose or suggest that the computer, to which information about the configuration of a receptacle container is provided, is configured to interact with a user. Rather, *Norris* describes a **fully automated, computer-controlled** system for accurately aligning an analyte receptacle with respect to a measuring device performing the assays. *Id.* at col. 7, line 12 – col. 9, line 34. It does not provide for any user interaction. None of the rationales provided by the Examiner for combining the teachings of *Ganser* and *Norris* implies that information on the receptacle device is displayed to the user. Similarly, none of the rationales implies that selection functions specific to the receptacle device are provided so as to allow a user to allocate individual biological objects to be excised from the biological material to individual receptacle containers.

---

to **control** the allocation of the individual biological objects.

Secondly, *Norris* does not at all relate to a laser microdissection system as described and claimed in the present application. While the Examiner has asserted that *Norris* teaches controlling the position of a receptacle device to allow for preparation of samples, there are no specific disclosures relating to sample preparation in *Norris*. Rather, as explicitly stated, for example in col. 1, lines 8-10, col. 2, lines 62-67, and claims 1 and 11 of *Norris*, *Norris* relates to the **analysis** of analyte samples rather than sample **preparation**, which are two very distinct and separate functions. Contrary to the Examiner's suggestion, it would not have been obvious to use the identification mechanism for a **sample analysis system** as taught by *Norris*, in the laser microdissection system of *Ganser*, which relates to **sample preparation**. The Examiner has not provided any support for the position that there would have been a reasonable expectation of success to combine the elements of *Norris* and *Ganser* at the time of Applicants' invention. The rationales underlying the Examiner's rejections suggest that sample analysis devices be bodily incorporated into a sample preparation system, but such an incorporation is unconventional and non-obvious.

For the foregoing reasons, the Examiner has not established a *prima facie* case of obviousness regarding independent claims 1, 19, and 20. To establish a *prima facie* case of obviousness of a claimed invention, **all** the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q 580 (CCPA 1974); MPEP §2143.03. The U.S. Supreme Court has held that the Federal Circuit's teaching, suggestion, or motivation test is not inconsistent with the analysis set forth in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), and can be used in the "expansive and flexible approach" of determining obviousness *vel non*. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007). *See also DyStar Textilfarben GmbH & Co. Deutschland KG. v. C.H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006) (flexible approach); *Alza Corp. v. Mylan Labs., Inc.*, 464 F.3d 1286, 1291 (Fed. Cir. 2006) (flexibility in obviousness jurisprudence). "Under Section 103 teachings of references can be combined **only** if there is some suggestion or incentive to do so." *ACS Hospital Systems, Inc. v. Montefiore Hospital et al.*, 221 USPQ 929, 933, 732 F.2d 1572 (Fed. Cir. 1984) (emphasis original). "Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be '**clear and particular**.'" *Winner Int'l Royalty Corp. v. Wang*, 53 USPQ2d 1580,

1587, 202 F.3d 1340 (Fed. Cir. 2000) (emphasis added; citations omitted); *Brown & Williamson Tobacco Corp. v. Philip Morris, Inc.*, 56 USPQ2d 1456, 1459 (Fed. Cir. Oct. 17, 2000). Applied to the circumstances here, there is no teaching, no suggestion, and no motivation to arrive at each and every element of claims 1, 19, and 20.

Furthermore, in *Graham v. John Deere Co.*, the U.S. Supreme Court held that in applying the "nonobviousness condition on patentability ... the Patent and Trademark Office should make 'several basic factual inquiries.' The inquiries are: (1) 'the scope and content of the prior art,' (2) 'differences between the prior art and the claims at issue,' and (3) 'the level of ordinary skill in the pertinent art.'" *Chisum on Patents*, §5.03. In *KSR Int'l Co. v. Teleflex Inc.*, this factual inquiry was recently reaffirmed by the Court as being the "framework for objective analysis for determining obviousness." MPEP §2141. "Once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art." *Id.* In determining whether the claimed invention would have been obvious to one of ordinary skill in the art, there must have been "a reasonable expectation of success" at the time the claimed invention was made. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986), *cited in*, MPEP § 2143.02. "Obviousness does not require absolute predictability, however, at least some degree of predictability is required. Evidence showing there was no reasonable expectation of success may support a conclusion of nonobviousness." *Id., citing In re Rinehart*, 531 F.2d 1048 (CCPA 1976). Thus, if the Examiner cannot show that there would have been a reasonable expectation of success to combine the elements of the prior art at the time of Applicants' invention, the Examiner has failed to establish a *prima facie* case of obviousness.

Accordingly, independent claims 1, 19, and 20, as amended, distinguish over *Ganser* taken alone and/or in view of *Norris*. Claims 2-18 depend from independent claim 1. Since dependent claims contain all the limitations of the independent claims, claims 1-18 distinguish over *Ganser* taken alone and/or in view of *Norris* as well, and the Examiner's rejection should be withdrawn.

CONCLUSION

In this Response, Applicants have amended certain claims. In light of the Office Action, Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

Applicants acknowledge the continuing duty of candor and good faith to disclosure of information known to be material to the examination of this application. In accordance with 37 CFR §1.56, all such information is dutifully made of record. The foreseeable equivalents of any territory surrendered by amendment are limited to the territory taught by the information of record. No other territory afforded by the doctrine of equivalents is knowingly surrendered and everything else is unforeseeable at the time of this amendment by the Applicants and their attorneys.

Applicants respectfully submit that all of the grounds for rejection stated in the Examiner's Office Action have been overcome, and that all claims in the application are allowable. No new matter has been added. It is believed that the application is now in condition for allowance, which allowance is respectfully requested. It is believed that no fee is due with this Amendment. However, if any fees are due with respect to Sections 1.16 or 1.17, please charge to the deposit account of the undersigned firm, Acct. No. 503,836.

PLEASE CALL the undersigned if that would expedite the prosecution of this application.

Respectfully submitted,

Date: January 27, 2010

By: Rebecca A. Tie

Rebecca A. Tie, Reg. No. 62,095
Attorney for Applicants

Mayback & Hoffman, P.A.
5722 S. Flamingo Road #232
Fort Lauderdale, Florida 33330
Tel (954) 704-1599
Fax (954) 704-1588